DEPARTMENT OF BACTERIOLOGY
AND IMMUNOLOGY

March 6, 1959

Doctor Joshua Lederberg, Head
Department of Medical Genetics
Stanford University Medical School
Palo Alto, California

Dear Josh:

I gather from Dennis Watson that you survived subculture with a high efficiency-of-plating and that progress has begun without an appreciable lag phase. I would if the close proximity of biochemists will be mutagenic or selective. With the primary heterogenotes in California, and numerous exogenotes such as Zinder in New York, Morse in Colorado, and Wright in Australia, you should be subject easily to global transduction.

As you know, I have recently received inquiries concerning positions at Cornell, Western Reserve and Duke. The latter I declined immediately on the basis of integration problems there. I am not willing to run the risk of cancelled public schools, etc. I have visited Cornell and Western Reserve. Both made financially attractive offers and had superior laboratory facilities to my present situation. For a variety of reasons, I have decided not to accept either offer. I have been attempting to evaluate my position here with respect to facilities, scientific opportunity and academic atmosphere. My views remain the same as expressed previously.

I received your note and the NSF application today. I went over it and have sent off my appraisal.

Our own work progresses well, never as rapid as I would hope. I was away on the trip to Cornell and Western Reserve; I still haven't caught up. My problems in this respect must be small compared to yours.

The reciprocal crosses, in our hands, yield identical results:

$$A-Y^s \times B-Y^s \longrightarrow A+B+Y^s$$

$$A-Y^r \times B-Y^r \longrightarrow A+B+Y^r$$

where A+B+ are selected

$$A-Y^r \times B-Y^s \longrightarrow A+B+Y^s$$

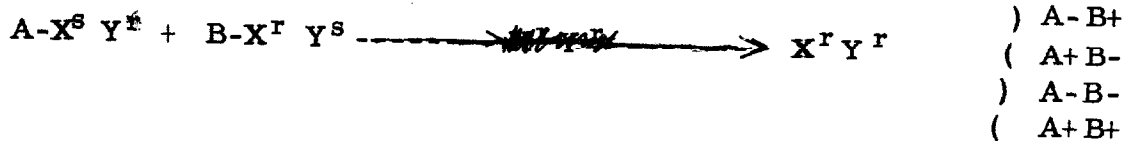$$A-Y^s \times B-Y^r \longrightarrow A+B+Y^s$$

A and B are nutritional markers; Y represents phage or streptomycin susceptibility.

If we select for presumably recessive markers, the results are more interesting:

$$A\text{-}X^s Y^s + B\text{-}X^r Y^s \longrightarrow X^r Y^r$$

)   A- B+
(A+ B-
)   A- B-
(A+ B+

By this procedure, we are avoiding the "heterokaryon" amd getting directly to the "gene recombinant". There still are some unusual aspects of nuclear behavior in this organism.

I should write more, but I need to get to other things. Also, I realize that you have much to do. My very best wishes to you and Esther.

Sincerely,

S. Gaylen Bradley

SGB:ch

I sometimes wonder why I have the office typist do my letters; this is the second typing of this letter. Things do seem to be improving here in one respect; we applied for a Departmental Training grant from U.S.P.H.S. If this is not abused by JTS, it should liberate some of my research funds for the purpose intended. JTS has been very these past two weeks so I am in a good mood. I do know certain things now: I will not go to any southern state with potential integration problems. I greatly appreciate all that you have done for me.

My very best wishes to you and Esther. *Gaylen*

Lois and the children are fine. Lois is busily engaged in school board problems.